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An Assessment of Marketing Loan Program Options

A Special Report to the House Committee
on Agriculture and the Senate Committee
on Agriculture, Nutrition, and Forestry

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PREFACE

Section 14 of the Farm Disaster Assistance Act of 1987 (the "1987 Act"), approved by the President on May 27, 1987, provided that, if marketing loan programs were not established for the 1987 crops of wheat, feed grains, and soybeans before enactment of the Act, the Secretary of Agriculture must report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry why such programs were not implemented.

This provision of the 1987 Act provides that this report must set forth:

- o An explanation of why marketing loans were not implemented for the 1987 crops of wheat, feed grains, and soybeans;
- o A comparison of 1987 program costs for wheat, feed grains, and soybeans with and without marketing loans;
- o An analysis of the effectiveness of marketing loans for upland cotton and rice;
- o A comparison of the effectiveness of marketing loans for upland cotton and rice and marketing loans for wheat, feed grains, and soybeans;
- o An analysis of how the use of generic certificates affects market prices for program commodities compared with marketing loans; and
- o An assessment of how a soybean marketing loan would affect other oilseed markets and the effectiveness of a marketing loan for sunflowers.

This report is submitted in accordance with Section 14 of the 1987 Act.

EXECUTIVE SUMMARY

The Food Security Act of 1985 (the "1985 Act") amended the Agricultural Act of 1949 (the "1949 Act") to provide for the mandatory implementation of marketing loans for the 1986-90 crops of upland cotton and the 1985-90 crops of rice. It also gives the Secretary of Agriculture discretionary authority to implement marketing loans for wheat, feed grains, and soybeans. To date, the Secretary has chosen not to exercise the marketing loan option for these program commodities.

When farm prices are below support levels, marketing loans allow producers to sell their commodities at prices below loan rates without reducing the minimum returns that loan rates guarantee. Selling commodities rather than forfeiting them to the Commodity Credit Corporation ("CCC") makes U.S. program commodities more competitive worldwide.

Implementation of marketing loans for rice and upland cotton has allowed the United States to regain the share of world trade for these commodities during the 1986/87 marketing year that it enjoyed in the early 1980's. But CCC outlays for rice and upland cotton associated with marketing loans are estimated to exceed \$635 million.

To date, the Secretary has not implemented marketing loans for wheat, feed grains, and soybeans for several reasons. Given market conditions, marketing loans for these commodities could be very costly. If they were implemented for the 1987 crops of wheat and feed grains in lieu of generic certificates, exports and domestic use would only rise modestly, but costs would total an additional \$920 million to \$1.55 billion above current expected outlays.

Cost estimates for a marketing loan for soybeans depend on the world price. With a price support level of \$4.77 a bushel and a market price of \$4.75 a bushel, costs for the 1987 crop of soybeans likely would range from \$13 to \$25 million, and the export and domestic crush response would be insignificant. However, if prices were to fall to \$4.25 a bushel, costs potentially could rise

to between \$340 and \$645 million. The marketing loan cost per-additional-bushel demanded would range from \$2.85 with a high demand response to \$10.80 with a low response.

If world soybean prices fell to \$4.25 a bushel, potential forfeitures of 1986-crop soybeans under CCC loan could boost costs an additional \$250 to \$350 million.

Although these estimates show that implementing a marketing loan for the 1987 soybean crop could be costly, other factors should be considered as well. First, with respect to demand considerations here and abroad, the flexibility of lowering the loan rate for corn and the statutory minimum loan rate of \$4.50 a bushel for soybeans over time could put soybeans at an economic disadvantage in relation to corn. Second, while use of generic certificates and the Export Enhancement Program ("EEP") are encouraging market competitiveness for some program commodities, they have had little effect on soybeans.

The nonrecourse loan and purchase program for soybeans indirectly provides support for nonprogram oilseeds such as sunflowers and cottonseed. By removing the price floor provided by the soybean loan rate, a soybean marketing loan would lower prices for these oilseeds as well. If marketing loans were extended to sunflowers, the estimated cost would range from \$5 million at a world price for soybeans of \$4.75 a bushel to \$26 million at \$4.25. Costs for a cottonseed marketing loan would range from \$9 to \$47 million.

Besides substantial costs, marketing loans have not been implemented for wheat, feed grains, and soybeans for several other reasons. Most significantly, the 1985 Act and the so-called "Findley Amendments" give the Secretary a greater degree of flexibility in lowering support levels for wheat and feed grains than for other program commodities.

In effect, marketing loans for wheat and feed grains would be analogous to further modest reductions in support levels, whereas, for rice and cotton and, depending on world prices,

soybeans, marketing loans have the potential for significantly enhancing price competitiveness. The modest potential price reductions offered by marketing loans for wheat and feed grains would add little to the price risk borne by foreign competitors, and would have only a modest effect on domestic use and exports.

Also, the use of generic certificates and the EEP has increased price competitiveness for wheat and feed grains. The use of generic certificates has reduced farm prices for corn and wheat during the 1986/87 marketing year below what they would have been otherwise. In addition, it is likely that use of generic certificates lowered corn prices during the 1986/87 marketing year as much as would have a program with a marketing loan and no certificates. For wheat, given last season's tighter balance between production and use

and because a marketing loan provides access only to current-year commodities pledged as collateral for price support loans, it can be argued that the use of generic certificates reduced wheat prices more than a marketing loan program would have without certificates. However, a marketing loan program for wheat could have created a competitive situation characterized by predatory pricing practices, possibly forcing wheat prices below levels attained with certificates.

The EEP has resulted in increased exports of wheat and barley. Moreover, the EEP may be more cost effective than marketing loans in pricing program commodities more competitively for export. This is because the cost of EEP-induced exports are paid only on bushels shipped, and can be limited, if appropriate, to specific markets. A marketing loan potentially can be made on all bushels eligible for a loan.

AN ASSESSMENT OF MARKETING LOAN PROGRAM OPTIONS

I. INTRODUCTION

The Food Security Act of 1985 (the "1985 Act") amended the Agricultural Act of 1949 (the "1949 Act") to provide the Secretary of Agriculture authority to implement several programs designed to enhance market competitiveness and to reduce surplus supplies of major program commodities. The 1985 Act provides for loan rate reductions; mandatory marketing loans for upland cotton and rice; discretionary marketing loans for wheat, feed grains, and soybeans; issuance of generic certificates; and expanded export promotion programs.

Marketing loans allow producers to repay nonrecourse price support loans at less than the announced loan rates. This encourages them to redeem commodities which had been pledged as collateral for price support loans and market them at prices near or below loan rates rather than forfeit them to the Commodity Credit Corporation ("CCC").

How Marketing Loans Work

Under a marketing loan, if world prices are below the loan rate producers may repay their nonrecourse loans at less than the loan rate. Loan repayment rates differ for each commodity, but, in general, are determined by the world price of the commodity or set at a minimum percentage of the basic loan rate, or at the greater of the two (3, 8) ^{1/}. Table 1 summarizes the loan repayment levels for program commodities for which the marketing loan has or could be implemented.

Other important aspects of the marketing loan are:

- o For all commodities except soybeans, the Secretary may make loan deficiency payments to producers who elect to forego obtaining a nonrecourse loan in return for a marketing loan deficiency payment. The payment is calculated as the difference between the loan rate and

the loan repayment level multiplied by the quantity of the crop eligible for the loan. The maximum amount eligible for this payment is determined by multiplying the participant's program acreage and program yield.

- o At least half of the rice loan deficiency payments for the 1986-1990 crops, if authorized, must be made in negotiable marketing certificates. Up to half of the loan deficiency payments for upland cotton may be made in certificates during 1986-1990. Marketing certificates are denominated in a fixed dollar value and may be sold or exchanged for stocks owned by the CCC.
- o Unlike other program payments, such as regular deficiency and diversion payments, gains that are realized from using marketing loans are not subject to the \$50,000 annual payment limitation. However, total annual payments for all programs, including marketing loan gains, must not annually exceed \$250,000 per person during 1987-1990.
- o If world prices are below loan repayment rates for rice and upland cotton, the Secretary also may issue negotiable marketing certificates to rice producers and to cotton first handlers (persons regularly engaged in buying or selling upland cotton). The value of these certificates is based on the difference between the loan repayment level and the adjusted world price for these commodities. Such payments are exempt from all payment limitations.
- o When a marketing loan is in effect, the Secretary must publish a formula for use in calculating world market prices and announce them regularly. For rice, the world price is based on a review of the prices at which rice is being traded worldwide, adjusted to reflect supply and demand conditions, tender results, and other relevant price indicators. The adjusted world price for upland cotton is the weekly average of the Northern Europe price, adjusted to U.S. location

^{1/} Underscored numbers in parentheses refer to items listed in the References.

Table 1--Repayment levels for program commodities

Commodity	Loan repayment rate when world market price is below the loan rate
Rice	Whichever is higher: the world market price, or 50 percent of the loan rate in 1986 and 1987, 60 percent in 1988, and 70 percent in 1989 and 1990.
Upland cotton: Plan A	The world market price, but no less than 80 percent of the loan rate.
Plan B	The world market price, but for the 1987-1990 crops, a minimum repayment rate may be established by the Secretary between the world price and 80 percent of the loan rate.
Wheat and feed grains	Whichever is higher: the world market price, or 70 percent of the basic loan rate.
Soybeans	The world market price.

and quality. The Northern Europe price is the weekly average of the quotations for the five lowest priced growths of the 10 growths quoted for Middling 1-3/32" cotton, c.i.f. Northern Europe (2).

How do marketing loans affect producers' marketing decisions? Consider corn producers as an example. The basic loan rate for the 1987 crop of corn is \$2.28 a bushel. The loan rate for corn, as announced by the Secretary, is 80 percent of the basic loan rate, or \$1.82 a bushel. This is the amount producers receive when taking out a 1987 loan for corn and repay plus interest when redeeming the loan collateral. If the world price for corn is less than 70 percent of the basic loan rate (\$1.60 a bushel or below), producers would repay under the marketing loan option at \$1.60 a bushel and retain 22 cents a bushel ($\$1.82 - \1.60) in loan principal in addition to the price they receive from the market (4).

What would producers do if the market price for corn was \$1.56 a bushel? For purposes of illustration, let us assume that the cost of

storing corn for 9 months is 26 cents a bushel and that the world price is equal to the local market price. In the absence of marketing loans, producers would be indifferent to selling corn or placing it under loan because in either case they would receive \$1.56 a bushel ($\$1.82 - \$0.26 = \1.56). However, under a marketing loan, producers could take out a loan at \$1.82, repay it at \$1.60, and then sell their corn at \$1.56, thus netting \$1.78 a bushel ($\$1.56 + \0.22). This demonstrates the attractiveness of the program, and why marketing loan costs for wheat and feed grains could be significant.

How low would the market price have to be before producers would forfeit their corn to CCC rather than repay their loans? Producers would receive 22 cents a bushel through the marketing loan if the world and local market price were \$1.34 a bushel, netting \$1.56 a bushel. This is the same return faced by producers who take out a nonrecourse CCC loan at \$1.82 a bushel and pay 9-month storage costs of 26 cents a bushel. Producers facing these storage charges would choose to forfeit corn to the CCC if the market price falls below \$1.34 a bushel.

For soybeans and upland cotton (under Plan B), where loan repayment levels are determined by the world price, there are no price floors. For example, if the loan rate for the 1987 crop of soybeans is \$4.77 and the world price is \$4.50, producers could repay loans at the world price and net a marketing loan payment of 27 cents a bushel. Producers would choose to repay their loans as long as local cash prices for soybeans did not fall below the world price. If local cash prices were below the world price, producers would fare better by forfeiting their soybeans to the CCC.

Unlike rice, wheat, and feed grains, whose minimum loan repayment rates are determined as a percentage of their basic loan rates, soybean and upland cotton (under Plan B) loan repayment rates would not provide producers with an established price floor. Market prices are allowed to fall to world levels and thus depend on world supply and demand conditions.

Effects of Marketing Loans On Price Support Levels

Table 2 presents the minimum loan and loan repayment rates and marketing loan payment

amounts for all program commodities. Basic loan rates for commodities during 1987–1990 are shown declining 5 percent annually, the maximum allowed. Minimum loan rates are set statutorily at \$4.50 a bushel for soybeans, 50 cents a pound for upland cotton, and \$6.50 a cwt for rice. Minimum repayment rates would become farm price support levels if world prices were to remain below loan repayment levels for wheat and feed grains. The world price is the loan repayment level if it is above the minimum loan repayment rate.

Compared with loan rates in 1985, rates in 1990 could be about 41 percent lower for wheat, 38 percent for feed grains, 19 percent for rice, 13 percent for upland cotton, and 10 percent for soybeans. With a marketing loan in place, the farm price floor could fall by as much as 46 percent for rice, over 45 percent for wheat and feed grains, and 30 percent for upland cotton. Per-unit marketing loan payments potentially are largest in 1987, and then could decline through 1990 as loan rates fall.

Table 2--Minimum loan rates and maximum loan repayment rates

Commodity and rate	1985	1986	Crop year		1989	1990
			1987	1988		
			<u>Cents per pound</u>			
Rice:						
Loan rate <u>1/</u> <u>2/</u>	8.00	6.89	6.84	6.50	6.50	6.50
Loan repayment rate	3.40	3.60	3.42	3.90	4.55	4.55
Marketing loan payment	4.60	3.29	3.42	2.60	1.95	1.95
Upland cotton:						
Loan rate <u>1/</u> <u>2/</u>	57.30	52.64	52.25	50.00	50.00	50.00
Loan repayment rate (Plan A)	---	44.00	41.80	40.00	40.00	40.00
Marketing loan payment	---	8.64	10.45	10.00	10.00	10.00
Loan repayment rate (Plan B)	---	<u>3/</u>	<u>4/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>
Marketing loan payment	---	<u>3/</u>	<u>4/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>
			<u>Dollars per bushel</u>			
Wheat:						
Basic loan rate <u>2/</u>	3.55	3.00	2.85	2.71	2.57	2.44
Findley loan rate <u>5/</u>	3.30	2.30	2.28	2.17	2.06	1.95
Loan repayment rate	---	2.10	2.00	1.90	1.80	1.71
Marketing loan payment	---	.20	.28	.27	.26	.24
Corn:						
Basic loan rate <u>2/</u>	2.55	2.40	2.28	2.17	2.06	1.96
Findley loan rate <u>5/</u>	---	1.84	1.82	1.74	1.65	1.57
Loan repayment rate	---	1.68	1.60	1.52	1.44	1.37
Marketing loan payment	---	.16	.22	.22	.21	.20
Grain sorghum:						
Basic loan rate <u>2/</u>	2.42	2.28	2.17	2.06	1.96	1.86
Findley loan rate <u>5/</u>	---	1.75	1.74	1.65	1.57	1.49
Loan repayment rate	---	1.60	1.52	1.44	1.37	1.30
Marketing loan payment	---	.15	.22	.21	.20	.19
Barley:						
Basic loan rate <u>2/</u>	2.08	1.95	1.86	1.77	1.68	1.60
Findley loan rate <u>5/</u>	---	1.49	1.49	1.42	1.34	1.28
Loan repayment rate	---	1.37	1.30	1.43	1.18	1.12
Marketing loan payment	---	.12	.19	.18	.16	.16
Oats:						
Basic loan rate <u>2/</u>	1.31	1.23	1.17	1.12	1.06	1.01
Findley loan rate <u>5/</u>	---	.95	.94	.90	.85	.81
Loan repayment rate	---	.87	.82	.78	.74	.71
Marketing loan payment	---	.08	.12	.12	.11	.10
Rye:						
Basic loan rate <u>2/</u>	2.17	2.04	1.94	1.84	1.75	1.67
Findley loan rate <u>5/</u>	---	1.56	1.55	1.47	1.40	1.34
Loan repayment rate	---	1.43	1.36	1.29	1.23	1.17
Marketing loan payment	---	.13	.19	.18	.17	.17
Soybeans:						
Basic loan rate	5.02	5.02	5.02	4.77	4.53	4.50
Findley loan rate <u>5/</u>	---	4.56	4.77	4.53	4.50	4.50
Loan repayment rate	---	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>
Marketing loan payment	---	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>

--- = Not applicable. 1/ Loan rates for 1986 reflect a 4.3-percent Gramm-Rudman-Hollings Act ("GRH") reduction. 2/ For 1987-1990, loan rates are assumed to decline 5 percent annually. 3/ Minimum loan repayment rates are based on world prices. 4/ Plan B for upland cotton will be in effect in 1987. 5/ Loan rates and loan repayment rates for wheat and feed grains are based on 80 and 70 percent, respectively, of basic loan rates. Loan rates for 1986 reflect a 4.3-percent GRH reduction.

II. WHY MARKETING LOANS HAVE NOT BEEN IMPLEMENTED FOR WHEAT, FEED GRAINS, AND SOYBEANS

Although the 1985 Act provides discretionary authority to the Secretary to implement marketing loans for wheat, feed grains, and soybeans through 1990, he has not done so for 1986 or 1987 for several reasons. Given supply and demand conditions, marketing loans would have been potentially very costly, and for wheat and feed grains it is unlikely that implementing such a loan would have enhanced competitiveness more than other programs did.

Moreover, the 1985 Act gives the Secretary a greater degree of flexibility in lowering support levels for wheat and feed grains than for other program commodities. The use of generic certificates and the Export Enhancement Program ("EEP") give the Secretary additional latitude in making U.S. program commodities more competitive. Each of these points is discussed in greater detail below.

Marketing Loan Outlays Would Be Large

Marketing loans have not been implemented for wheat, feed grains, and soybeans primarily because of the high cost. Had the Secretary implemented such loans for these crops in 1987, supplemental program outlays would have totaled \$935 million to \$2.2 billion, depending on the short-run responsiveness of export and domestic markets to lower prices for these commodities. Additionally, the short-run export and domestic feed use response to lower prices would have been modest relative to expected disappearance without marketing loans. An assessment of the benefits and costs of marketing loans for these crops is in Section IV.

More Discretion in Lowering Support Levels for Wheat and Feed Grains

The Agriculture and Food Act of 1981 (the "1981 Act"), forerunner to the 1985 Act, was enacted at a time of growing concern by producers and policymakers over farm income levels, effects of inflation on commodity prices, rising production costs due to inflation and energy shortages, and increased dependence on agricultural export markets. As a consequence, the 1981 Act established minimum target prices and loan rates for the

1982-85 crops of food grains, feed grains, and cotton at levels higher than for the 1978-1981 period governed by the Food and Agriculture Act of 1977 (10).

The 1981 Act amended the 1949 Act to provide the Secretary discretion to raise target prices to keep pace with rising production costs. And, it allowed for the lowering of loan rates by as much as 10 percent annually to protect U.S. competitiveness if the average farm price in the previous year was less than 105 percent of the previous year's loan rate (the "Findley Amendment"). To receive income and price support benefits, participants were required to put a designated share of their base acreage in conserving uses, whenever acreage reduction programs were in effect.

Higher loan rates for the 1982-85 crops artificially boosted market prices and effectively made the United States a "residual supplier" for major program commodities. Significantly higher target prices raised deficiency payments, assuring increased income support to producers and more program participation but added Government outlays.

Despite continued growth in world trade for agricultural commodities over the life of the 1981 Act (the 1982-85 crops), the United States' market shares for program commodities declined. World agricultural trade volume on a calendar-year basis annually averaged 374 million metric tons from 1977 to 1981, then rose by 12 percent to 420 million tons from 1982 to 1985. Average annual U.S. market shares for specific commodities, however, fell from 1977-81 levels: from 40 to 35 percent for wheat and flour products, 22 to 19 percent for rice, 74 to 68 percent for corn, 83 to 79 percent for soybeans, 38 to 26 percent for soybean meal, and 32 to 30 percent for cotton (table 3).

Declining export volumes and rising Government surpluses during the 1982-1985 crop years led to provisions in the 1985 Act designed to generate an orderly reduction in loan rates for all program commodities. For 1986, basic loan rates were set at \$3 a bushel for wheat and \$2.40 a bushel for corn. The

Table 3--U.S. exports as a share of world trade

Crop year	Wheat	Course grains	Corn	Rice	Soy- beans	Cotton
Percent						
1977	47	63	76	24	86	32
1978	43	64	78	20	84	31
1979	44	72	84	21	86	39
1980	46	64	76	24	82	28
1981	46	60	74	25	92	34
1982	40	60	74	19	88	27
1983	40	60	78	18	77	36
1984	31	55	70	16	66	30
1985 <u>1</u> /	32	45	58	19	79	11
1986 <u>2</u> /	34	56	66	20	73	29

1/ Estimated. 2/ Projected.

Secretary has authority to annually set basic loan rates for grain sorghum, barley, oats, and rye in accordance with the relative feed value for corn. For 1987-1990, basic rates for wheat and corn are to be set at 75 to 85 percent of the average of the farm prices received during the previous 5 crop years, excluding years with the highest and lowest prices. However, basic rates may not be lowered in any year by more than 5 percent from levels in the previous year.

The 1985 Act amended the 1949 Act to provide the Secretary the same authority as did the "Findley Amendments" of the 1981 Act to further reduce loan rates for wheat and feed grains. Accordingly, these reductions can be made annually by up to 20 percent of the current year's basic loan rates, if the Secretary deems further reductions below basic rates are necessary to maintain domestic and export grain markets. For 1986, support levels for wheat and corn were set at 80 percent of their basic loan rates--\$2.40 a bushel for wheat and \$1.92 for corn. These rates were effectively reduced by the 4.3-percent Gramm-Rudman-Hollings Act ("GRH") reduction to \$2.30 for wheat and \$1.84 for corn. Basic loan rates in 1987 are \$2.85 a bushel for wheat and \$2.28 for corn. With maximum "Findley" reductions, support levels have been set at \$2.28 for wheat and \$1.82 for corn.

The 1985 Act does not establish absolute minimum loan rates for wheat and feed grains, but it does for rice, soybeans, and upland cotton. For rice, the 1986 loan rate was \$7.20 a cwt, and for 1987-1990 it will be no less than 85 percent of the average for farm prices received during the previous 5 crop years, excluding years with the highest and lowest prices. The loan rate can be lowered by no more than 5 percent annually, but not below \$6.50 a cwt. The rice loan rate for 1987 was lowered the maximum 5 percent to \$6.84 a cwt.

The 1985 Act set the loan rate for soybeans at \$5.02 a bushel in 1986 and 1987. Thereafter, it will be 75 percent of the average farm price received during the 5 previous crop years, excluding years with the highest and lowest prices. The loan rate cannot be reduced by more than 5 percent from the previous year's level, nor set below \$4.50 a bushel through 1990. However, if the Secretary determines that the soybean loan rate could discourage domestic use or exports, it can be reduced an additional 5 percent. This was done in 1986 when the support level was set at \$4.77.

For upland cotton, the 1986 loan rate was 55 cents a pound. It was reduced by 5 percent for 1987 to 52.25 cents. The level cannot be reduced more than 5 percent annually to a minimum of 50 cents a pound through 1990.

The 1985 Act's impact on support levels for wheat and feed grains has been and should continue to be greater than that for rice, soybeans, and cotton. This is because support levels for wheat and feed grains can be reduced by up to 20 percent by the Findley adjustment, giving the Secretary greater discretion and flexibility in implementing annual programs to meet changing market conditions.

A marketing loan for soybeans would remove as a price floor the lower limit of \$4.50, and would create the potential for significantly increased program expenditures. With the announced world price usually setting the loan repayment rate for rice and upland cotton (and soybeans if implemented), marketing loans have the potential to keep loan rates from functioning as price floors for these commodities. Because loan repayment rates for wheat and feed grains can be no less than 70 percent of basic loan rates, the possibility for lowering price floors is less than for rice, cotton, and soybeans.

In effect, marketing loans for wheat and feed grains would be analogous to further modest reductions in support levels, whereas, for rice and cotton, and, depending on world prices, soybeans, marketing loans have the potential for significantly enhancing price competitiveness. The modest potential price reductions offered by grain marketing loans would add little to the price risk borne by foreign competitors, and would have only a modest effect on domestic use and exports.

Generic Certificates Lowered Prices For Corn and Wheat

The use of generic certificates likely lowered farm prices for 1986-crop corn about the same as a marketing loan would have. For wheat, a marketing loan without certificates likely would have had an indeterminate effect on farm prices compared with the use of generic certificates. The use of certificates may have lowered 1986-crop grain sorghum prices the same or below what they would have been without certificates, but it appears to have

had a negligible impact on farm prices for barley, oats, rye, and soybeans. An assessment of the impact of the use of generic certificates on farm prices is in Section V.

EEP Pricing U.S. Wheat and Barley Exports More Competitively

The EEP, mandated through fiscal 1988, also has played a significant role in lowering U.S. export prices for wheat and barley. The EEP may be more cost effective than marketing loans in expanding exports of program commodities. This is because the cost of EEP-induced exports is paid only on bushels shipped, while a marketing loan could be paid on all bushels eligible for a loan.

For instance, average EEP bonuses for wheat are estimated to be about \$30 per metric ton for 1987/88, roughly equivalent to 82 cents a bushel. Without EEP, U.S. export prices in 1987/88 for wheat could be about \$95 to \$120 per ton, f.o.b. basis, depending on class. The 82-cents-a-bushel cost of exporting wheat through the EEP is much less than the \$4.50 to \$20.90 cost per-additional-bushel demanded with a marketing loan estimated for 1987/88. Marketing loan cost estimates for wheat, feed grains, and soybeans are presented in Section IV.

The EEP has resulted in increased exports of wheat and barley. It is estimated that EEP sales equaled 25 percent of total U.S. wheat exports, or about 240 million bushels, during the 1985/86 marketing year. Most of the wheat sold through EEP in its first year went to North Africa and Middle Eastern markets where European Community sales had been concentrated. Thus far, EEP-induced exports as a percent of fiscal 1987 exports have reached 40 percent for wheat. The Soviet Union already has purchased 147 million bushels of wheat through the EEP. And EEP's impact on U.S. barley exports during the 1986/87 marketing year was enormous, accounting for 90 percent of the 142 million bushels exported. Virtually all of the barley was purchased by Saudi Arabia.

III. 1987 ESTIMATED PROGRAM COSTS FOR WHEAT, FEED GRAINS, AND SOYBEANS

Without marketing loans, CCC net cash outlays during the 1987 crop year for price support and production control programs are estimated to be about \$14.3 billion for wheat, feed grains, and soybeans (table 4). Corn outlays make up 65 percent of the total, wheat 26 percent, and soybeans 1 percent.

Without the use of generic certificates, marketing loan costs for the 1987 crops of wheat, feed grains, and soybeans could range between \$935 million with a high demand response and a \$4.75 world price for soybeans to \$2.2 billion with a low demand response and a \$4.25 price. (A detailed explanation of these cost estimates is given in Section IV). This would raise total cash outlays to between \$15.2 and \$16.5 billion. Marketing loans also would increase loan placements. It is assumed that all production from program harvested area for wheat (1.83 billion bushels) and corn (5.75 billion bushels) as well as the entire soybean crop (1.83 billion bushels) would be placed under loan. Bushels placed under loan but not redeemed would be forfeited.

Estimated marketing loan costs for wheat would range from about \$325 million with a high demand response to \$455 million with a low response. For feed grains (85 to 90 percent for corn), costs would range from \$600 million to \$1.1 billion. For soybeans, marketing loan costs would vary significantly, depending on the world price for soybeans. At

an assumed world price of \$4.25 a bushel, outlays would range from \$340 million with a high demand response to about \$645 million with a low response. At a world price of \$4.75, outlays would total only \$13 million at the high end and \$25 million at the low end, but the demand response would be insignificant.

If world soybean prices fell to \$4.25 a bushel, potential forfeitures of 1986-crop soybeans under CCC loan could boost costs an additional \$250 to \$350 million.

The assessment of marketing loans for wheat, feed grains, and soybeans was made for the 1987 crop year only. Lower market prices would increase exports and domestic use in the short run, but also could spur long-run benefits. First, the long-run response to a drop in market prices could lead to annual increases in demand here and abroad for program commodities over time. Domestic livestock producers would incur lower feed costs, and thereby increase feed use and potentially expand output. Second, implementation of marketing loans would convey to our export competitors worldwide that the United States will not set support prices for program commodities significantly above market-clearing levels. Our competitors would face market-oriented price risks rather than having such risks reduced by U.S. farm policies.

Table 4--Projected costs for 1987 commodity programs: CCC outlays for 1987 ^{1/}

Commodity	Base program outlays ^{2/}	High demand response		Low demand response	
		Marketing loan outlays	Base program outlays with marketing loans	Marketing loan outlays	Base program outlays with marketing loans
Million dollars					
Wheat	3,786	323	4,109	455	4,241
Corn	9,277	525	9,802	937	10,214
G. sorghum	718	36	754	92	810
Barley	334	46	380	62	396
Oats	32	(11)	21	3	35
Rye	7	2	9	3	10
Soybeans @					
\$4.25	158	340	497	644	802
\$4.50	158	176	334	335	493
\$4.75	158	13	171	25	183
Total with soybeans @					
\$4.25	14,312	1,261	15,573	2,196	16,508
\$4.50	14,312	1,098	15,410	1,887	16,199
\$4.75	14,312	935	15,247	1,577	15,889

^{1/} Includes direct and indirect payments to be made in cash only. ^{2/} Program outlay estimates presented in the President's Budget, February 1987, for fiscal 1988, except for wheat where base outlays were computed by weighting cost estimates for fiscal 1987 by one-third and fiscal 1988 by two-thirds.

IV. THE EFFECTIVENESS OF MARKETING LOANS: EXPERIENCE WITH RICE AND UPLAND COTTON COMPARED WITH ESTIMATES FOR WHEAT, FEED GRAINS, AND SOYBEANS

Experience with Rice And Upland Cotton Programs

The 1985 Act mandated marketing loans for rice and upland cotton. A marketing loan was implemented for rice on April 15, 1986, and for upland cotton (under Plan A) on August 1, 1986. More than 90 percent of program base acres for both commodities were enrolled in the 1986 CCC acreage reduction programs, as producers sought protection from expected sharp price drops under these programs. U.S. rice and upland cotton prices fell to world levels.

The difference between U.S. No. 2 milled (4-percent broken) rice and Thailand 100 percent grade B rice, c&f Rotterdam, was as high as \$260 per metric ton in early 1985. The marketing loan caused this differential to narrow to less than \$105 by late April 1986, and by August 1986 to less than \$53 (fig. 1).

A marketing loan had a similar effect on U.S. upland cotton prices (fig. 2). The Memphis territory cotton price was 30 cents a pound

higher than the world index price prior to June 1, 1986, then fell sharply with the marketing loan program. With the upland cotton marketing loan and certificate programs, prices for U.S. cotton in Northern Europe have been at or below the world price since August 1986.

Export sales reflect these price changes. Rice exports for calendar 1986 approached 2.4 million metric tons, an increase of 25 percent over 1985 levels (fig. 3). Rice exports for 1987 are estimated to be 2.3 million metric tons, a 21-percent increase over 1985. The U.S. share of world rice trade was about 19 percent in 1986, up slightly from a depressed 17 percent in 1985. World trade projections suggest that most of this increase came about because of expanded trade, since the volume of shipments from competing origins remained approximately the same (7).

U.S. upland cotton exports for the 1986/87 marketing year are estimated to be 6.7 million bales, a 240-percent increase over 1985/86 (fig. 4). Similarly, the U.S. share of world

Figure 1

World rice prices: Weekly quotations, Rotterdam

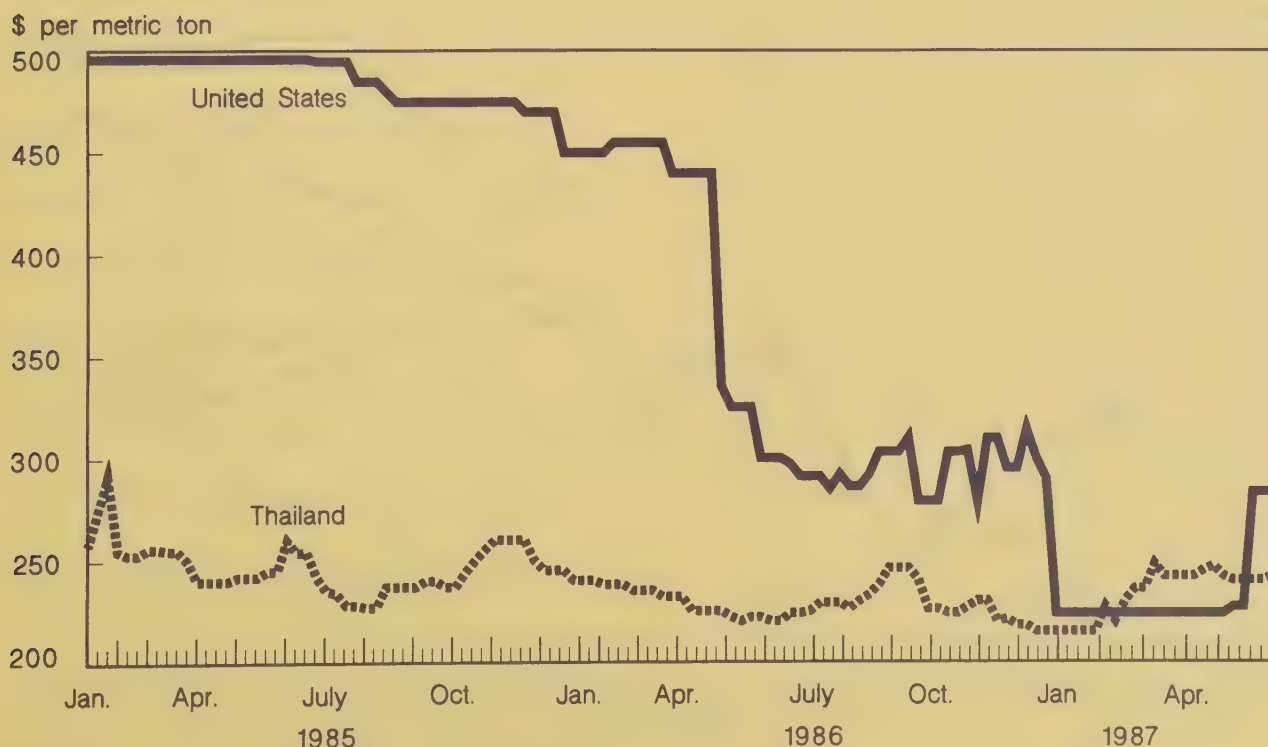


Figure 2

World cotton prices: Weekly quotations, Northern Europe

Cents per pound

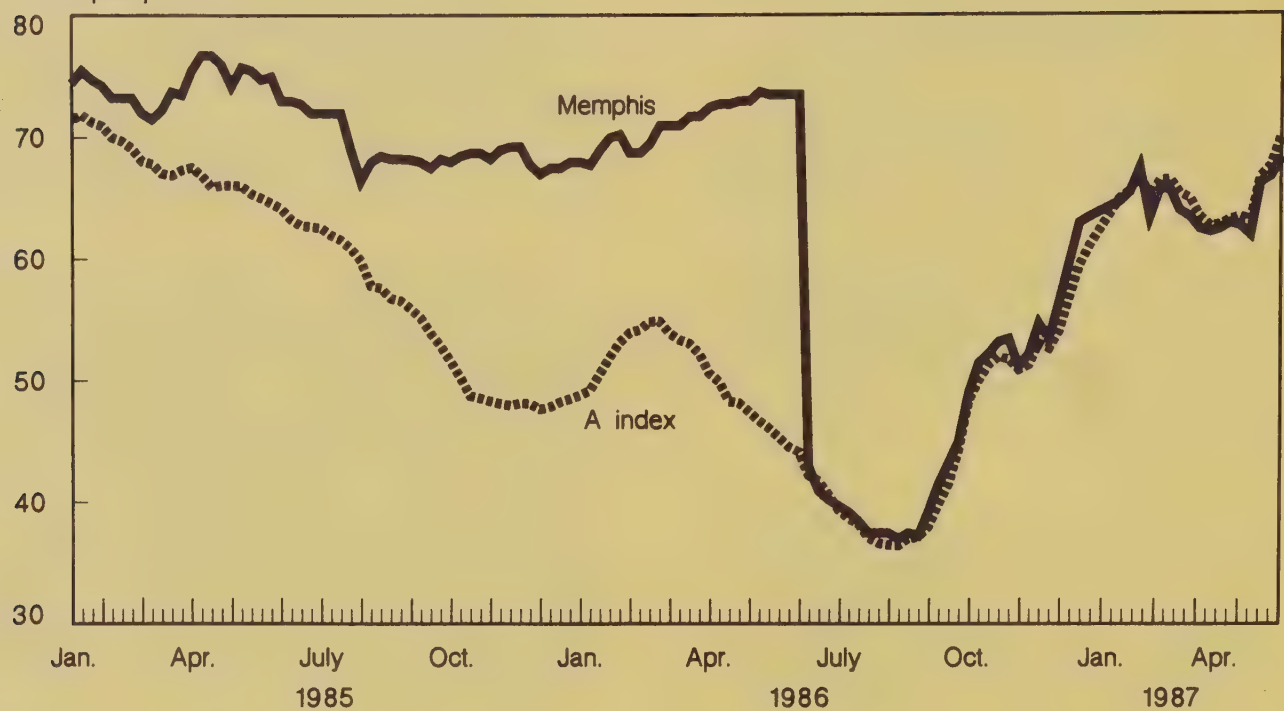


Figure 3

World rice exports

Million metric tons

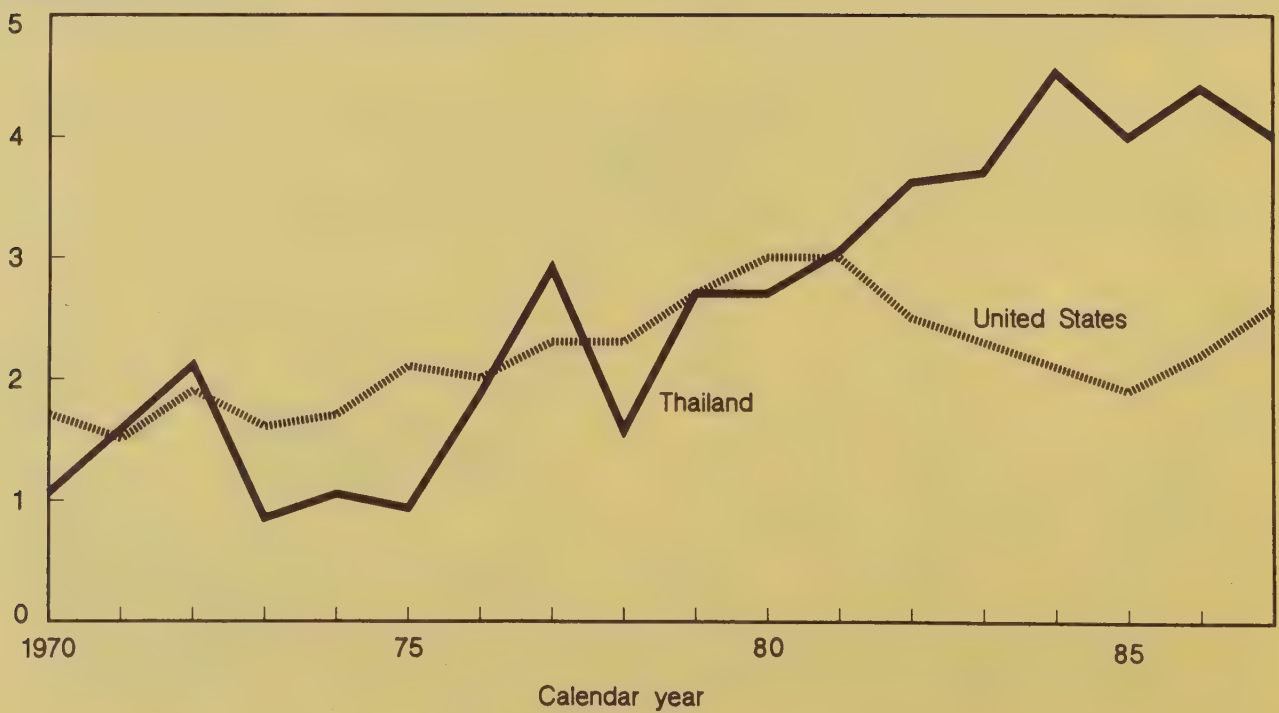
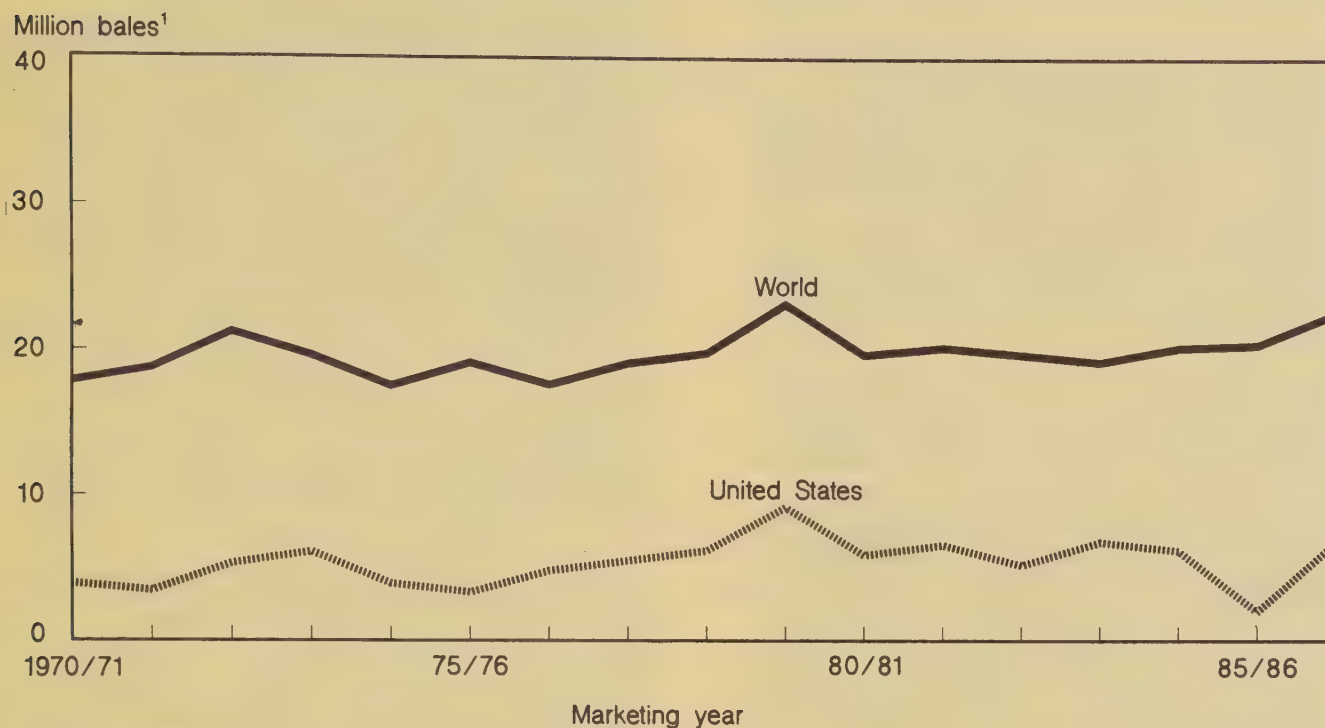


Figure 4

World cotton exports



^{1/} A bale weighs 480 pounds.

Table 5--Estimated marketing loan outlays for rice for the 1986 crop year

Item	Unit	Estimate
Production	Mil cwt	134.4
Gross marketing loan outlays ^{1/}	Mil \$	395-450
Outlays for marketing certificates	Mil \$	10-15
Total gross outlays	Mil \$	405-465
Loan forfeiture and storage cost savings	Mil \$	120-135
Net marketing loan outlays	Mil \$	285-330
Net demand response	Mil cwt	20-30
Net marketing loan outlay per additional cwt of demand	\$/cwt	9.50-16.50

^{1/} Based on the difference between the loan rate and the loan repayment rate, multiplied times eligible production.

cotton trade is projected to rebound from an unusually low 10 percent during the 1985/86 marketing year to a more normal 29 percent in 1986/87.

Preliminary cost estimates for the 1986 rice program can be made on the basis of repayment rates and production figures (table 5). Based on 1986 production estimates and assuming an average repayment rate of \$3.60 per cwt (the loan rate minus the loan repayment rate), gross marketing loan outlays for the 1986 crop could range between \$395 and \$450 million.

Additional outlays for marketing certificates could boost rice costs to between \$405 and \$465 million. Gross outlays for rice would be offset somewhat by reduced CCC storage costs and loan forfeitures. Nevertheless, the increase in CCC outlays associated with a marketing loan is estimated to be \$285 to \$330 million for rice. Based on current domestic demand and export projections for the 1986/87 marketing year, the rice marketing loan would cost from \$9.50 to \$16.50 per additional cwt of total demand.

The 1986 upland cotton crop was 9.5 million bales. Gross marketing loan outlays are estimated to range from \$450 to \$490 million (table 6). Additional outlays for first-handler certificates and inventory protection payments (issued to holders of upland cotton free stocks on August 1, 1986, to protect them from sharp price declines resulting from the marketing loan) could boost costs to \$1.2 billion. However, savings from loan forfeitures and reduced CCC storage costs could approach \$800 million, substantially reducing the net costs. Estimates for net marketing loan outlays for upland cotton for the 1986 crop are between \$350 to \$500 million. Based on upland cotton demand estimates for the 1986/87 marketing year, the marketing loan for cotton costs between 20.8 and 41.7 cents for each additional pound of total demand.

Questions remain whether the rise to date in exports for upland cotton and rice is sustainable. The dramatic rise in export sales for cotton and rice following implementation of marketing loans was due in part to deferred sales of 1985 crops. Anticipating lower prices

Table 6--Estimated marketing loan outlays for upland cotton for the 1986 crop year

Item	Unit	Estimate
Production	Mil 480-lb bales	9.5
Gross marketing loan outlays <u>1/</u>	Mil \$	450-490
Outlays for first-handler certificates and inventory protection payments	Mil \$	700-740
Total gross outlays	Mil \$	1,150-1,230
Loan forfeiture and storage cost savings	Mil \$	730-800
Net marketing loan outlays	Mil \$	350-500
Net demand response	Mil 480-lb bales	2.5-3.5
Net marketing loan outlay per additional pound of demand	¢/lb	20.8-41.7

1/ Based on the difference between the loan rate and the loan repayment rate, multiplied times eligible production.

from both reduced loan rates and marketing loans, importers waited to make some of their purchases.

This is particularly true for importers of U.S. cotton who, in the 1985/86 marketing year, purchased only a third of their 1984/85 levels. While 1986/87 U.S. cotton exports are estimated to be about 240 percent above the 1985/86 level, they are only 7 percent above 1984/85 levels. Exports of cotton during the 1987/88 marketing year may fall slightly from 1986/87 levels to 6.5 million bales because foreign production is expected to rise more than overseas consumption.

The large increase in U.S. rice exports also was due partly to a drought that forced Brazil to purchase 478,000 tons (milled basis) of U.S. rice in 1986. This amount represents 20 percent of total U.S. rice exports that year. The United States was not the sole source of Brazilian rice imports, and it is likely that Brazil would have purchased from others had a marketing loan not been in place. U.S. rice exports for the 1987/88 marketing year may fall from 1986/87 levels to 78 million cwt, although the U.S. share of world trade is projected to remain the same.

Estimates for Wheat, Feed Grains, and Soybeans

If the Secretary implements marketing loans without generic certificates for wheat, feed grains, and soybeans in 1987, supplemental program outlays could range between \$935 million and \$2.2 billion, depending on the export and domestic feed use responses to lower prices. For soybeans, marketing loan outlays would vary significantly depending on the assumed world price. At a price of \$4.75 a bushel, outlays for soybeans as a share of total marketing loan outlays for wheat, feed grains, and soybeans would be only 1 to 2 percent at both a high and low demand response. But, at \$4.25, soybean outlays would account for 27 to 29 percent of the total.

Marketing loan cost estimates assume that:

- o Supply/demand conditions for the 1987/88 marketing year, from which export and domestic demand response estimates were made, are the same as those presented in the June 1987 World Agricultural Supply and Demand Estimates report.

- o For wheat and feed grains, all production on participants' harvested acreage is placed under loan and is eligible for a marketing loan.
- o The entire soybean crop is eligible for a marketing loan, because participants are not required to idle acreage to receive price support loans.
- o The cost of a marketing loan for the 1987 crop of soybeans is estimated at three assumed world prices and a \$4.77 loan rate. Three individual assessments are made where all soybean loans are repaid at assumed average world market prices of \$4.25, \$4.50, and \$4.75 a bushel.
- o Gross marketing loan outlays for each commodity are equal to total eligible bushels times the per-bushel marketing loan gain. Increases in exports and domestic feed use induced by marketing loans are satisfied by redeeming commodities pledged as collateral for price support loans that otherwise would have been forfeited to CCC.
- o Two export response scenarios are assessed. Short-run export demand responses assumed to be induced by changing prices under a marketing loan are expressed in the following elasticity ranges: -0.20 to -0.80 for wheat; -0.20 to -0.60 for corn, barley, oats, and rye; -0.30 to -0.80 for grain sorghum; and -0.30 to -0.60 for soybeans (1). For example, under the high export response for wheat with a price elasticity of -0.80, a 10-percent decline in the price for wheat would result in an 8-percent increase in wheat exports.
- o Two domestic feed demand response scenarios also are assessed. Short-run domestic elasticity ranges are: -0.30 to -0.50 for wheat; -0.20 to -0.40 for feed grains; and -0.30 to -0.60 for soybeans (9).
- o The annual storage cost for CCC-owned grain is assumed to be 35 cents a bushel. Net marketing loan outlays for each commodity are equal to gross outlays minus the sum of reduced CCC forfeitures (increased exports and domestic feed use multiplied by the effective loan rate) and reduced CCC

storage costs (bushels exported and fed domestically rather than forfeited multiplied by the 35 cents per-bushel storage cost).

- o The EEP is in place for the 1987/88 marketing year and significantly increases U.S. exports of wheat and barley. The export response from the marketing loan for wheat and barley is based on total exports in the 1987/88 marketing year expected as of June 1987 minus the amount expected to be exported through the EEP.
- o Generic certificates are not used in the 1987 program.
- o World prices for wheat, feed grains, and soybeans would fall to repayment levels in the 1987/88 marketing year.

Assumptions about the response of exports and domestic feed use for program commodities to lower loan rates and marketing loans are critical in estimating costs per-additional-bushel demanded. Without a significant demand response, the total cost for increased exports and domestic demand become very high because marketing loan costs accrue on *all* bushels eligible for price support loans, not just those additionally demanded. Since the demand response to price changes can only be approximated, a range of short-run elasticities for export and domestic demand was selected based on recent empirical analyses (1, 9).

Domestic livestock producers benefit directly from lower commodity prices because their feed costs decline. In particular, this is helping poultry producers, who are expected to raise output by 10 percent in 1987, and pork producers, who are expanding output for the first time since 1983.

With a high demand response, a marketing loan could boost total disappearance for wheat by 72 million bushels in the 1987/88 marketing year, of which 61 million would be exported and 11 million would be fed domestically (table 7). For corn, total disappearance would rise by 341 million bushels—116 million in exports and 225 million in domestic feed use. In a relative sense, the increase in quantity demanded resulting from a marketing loan would be greater for feed grains than for

wheat and soybeans because most U.S. feed grain output is used domestically as livestock feed. In recent years, over 60 percent of all corn has been consumed domestically as feed. In addition, the export response for wheat is modest relative to corn because nearly half of the initial wheat exports during the 1987/88 marketing year are assumed to be made through the EEP, lowering the base from which the marketing loan export response is computed. Consequently, a marketing loan for wheat would not influence EEP-induced exports.

Gross marketing loan outlays would not vary with different export and domestic feed use responses, but both loan forfeiture and storage cost savings rise as exports and domestic feed use increase. As a result, marketing loan costs per-additional-bushel demanded are smaller because gross outlays are spread over more bushels. With a high demand response, costs would be \$4.48 a bushel for wheat and \$1.54 for corn.

With a low demand response, a marketing loan for the 1987 wheat crop would only boost exports by 15 million bushels and domestic feed use by 6 million. Corn exports of 39 million bushels would be only a third the amount with a high response, and the increase in domestic feed use would drop by half to 112 million. These lower responses would greatly increase the cost per-additional-bushel demanded—about \$21 for wheat and \$6.20 for corn—relative to current cash prices. As of early July, these costs were 8 times the domestic cash price for wheat (Kansas City, No. 2 Hard Red winter) and 4 times the cash price for corn (Central Illinois, No. 2 yellow).

The 1987/88 marketing year supply and demand estimates for wheat, feed grains, and soybeans in June 1987, which were used to make the marketing loan cost assessments, reflect the current availability of generic certificates and the expectation that more will be issued. Thus, the June estimates reflect USDA expectations of how certificates will affect the markets for program commodities. Since certificates likely had little or no impact on farm prices for other feed grains and soybeans in 1986/87, it is expected that they will have little or no impact during the 1987/88 marketing year.

Certificates, however, lowered farm prices for

Table 7--Estimated marketing loan outlays for the 1987 crops of wheat and feed grains

Commodity and item	Computation	Demand response	
		High	Low
Wheat:			
A. Basic loan rate		\$2.85	\$2.85
B. Effective loan rate	(A * .80)	\$2.28	\$2.28
C. Marketing loan repayment rate	(A * .70)	\$2.00	\$2.00
D. Per-bushel marketing loan payment	(B - C)	\$0.28	\$0.28
E. Percent change in price	((C - B) / B) * 100)	-12.3	-12.3
F. Export demand elasticity		-0.80	-0.20
G. Domestic feed use elasticity		-0.50	-0.30
H. Eligible bushels (mil)		1,830	1,830
I. Base exports (mil bu)		625	625
J. Base domestic feed use (mil bu)		175	175
K. Gross marketing loan outlays (mil)	((D * H) * 1000)	\$513	\$513
L. Export response (mil bu)	(I * ((E * F) / 100))	61	15
M. Domestic feed use response (mil bu)	(J * ((E * G) / 100))	11	6
N. Per-bushel storage cost saving		\$0.35	\$0.35
O. Loan forfeiture and storage cost savings (mil)	((L + M) * (B + N))	\$190	\$57
P. Net marketing loan outlays (mil)	(K - O)	\$323	\$455
Per-bushel net marketing loan outlay	(P / (L + M))	\$4.48	\$20.90
Corn:			
A. Basic loan rate		\$2.28	\$2.28
B. Effective loan rate	(A * .80)	\$1.82	\$1.82
C. Marketing loan repayment rate	(A * .70)	\$1.60	\$1.60
D. Per-bushel marketing loan payment	(B - C)	\$0.22	\$0.22
E. Percent change in price	((C - B) / B) * 100)	-12.1	-12.1
F. Export demand elasticity		-0.60	-0.20
G. Domestic feed use elasticity		-0.40	-0.20
H. Eligible bushels (mil)		5,750	5,750
I. Base exports (mil bu)		1,600	1,600
J. Base domestic feed use (mil bu)		4,650	4,650
K. Gross marketing loan outlays (mil)	((D * H) * 1000)	\$1,265	\$1,265
L. Export response (mil bu)	(I * ((E * F) / 100))	116	39
M. Domestic feed use response (mil bu)	(J * ((E * G) / 100))	225	112
N. Per-bushel storage cost saving		\$0.35	\$0.35
O. Loan forfeiture and storage cost savings (mil)	((L + M) * (B + N))	\$740	\$328
P. Net marketing loan outlays (mil)	(K - O)	\$525	\$937
Per-bushel net marketing loan outlay	(P / (L + M))	\$1.54	\$6.20
Grain sorghum, barley, oats, and rye:			
Net marketing loan outlays (mil)		\$74	\$160
Total net marketing loan outlays (mil)		\$922	\$1,552

corn and wheat during the 1986/87 marketing year below what they would have been otherwise. And, it is expected that they will do the same in 1987/88. One could assume that without the use of certificates in 1987/88, farm prices for corn and wheat would be higher, which would lower both exports and

domestic feed use. Consequently, the benefits of a marketing loan could be smaller.

Marketing loan cost estimates for soybeans are quite sensitive to the assumed world price. For instance, with a loan rate of \$4.77 a bushel and a world price of \$4.25 a bushel,

Table 8--Estimated marketing loan outlays for the 1987 crop of soybeans

Demand response and item	Computation	Assumed world price		
		\$4.25	\$4.50	\$4.75
High demand response:				
A. Basic loan rate		\$4.77	\$4.77	\$4.77
B. Effective loan rate	(A * .80)	\$4.77	\$4.77	\$4.77
C. Marketing loan repayment rate		\$4.25	\$4.50	\$4.75
D. Per-bushel marketing loan payment	(B - C)	\$0.52	\$0.27	\$0.02
E. Percent change in price	((C - B) / B) * 100)	-10.9	-5.7	-0.4
F. Export demand elasticity		-0.60	-0.60	-0.60
G. Domestic crush elasticity		-0.60	-0.60	-0.60
H. Eligible bushels (mil)		1,825	1,825	1,825
I. Base exports (mil bu)		650	650	650
J. Base crush (mil bu)		1,170	1,170	1,170
K. Gross marketing loan outlays (mil)	((D * H) * 1000)	\$949	\$493	\$36
L. Export response (mil bu)	(I * ((E * F) / 100))	43	22	1.6
M. Domestic crush response (mil bu)	(J * ((E * G) / 100))	77	40	2.9
N. Per-bushel storage cost saving		\$0.35	\$0.35	\$0.35
O. Loan forfeiture and storage cost savings (mil)	((L + M) * (B + N))	\$610	\$316	\$23
P. Net marketing loan outlays (mil)	(K - O)	\$340	\$176	\$13
Per-bushel net marketing loan outlay	(P / (L + M))	\$2.85	\$2.85	\$2.85
Low demand response:				
A. Basic loan rate		\$4.77	\$4.77	\$4.77
B. Effective loan rate	(A * .80)	\$4.77	\$4.77	\$4.77
C. Marketing loan repayment rate		\$4.25	\$4.50	\$4.75
D. Per-bushel marketing loan payment	(B - C)	\$0.52	\$0.27	\$0.02
E. Percent change in price	((C - B) / B) * 100)	-10.9	-5.7	-0.4
F. Export demand elasticity		-0.30	-0.30	-0.30
G. Domestic crush elasticity		-0.30	-0.30	-0.30
H. Eligible bushels (mil)		1,825	1,825	1,825
I. Base exports (mil bu)		650	650	650
J. Base crush (mil bu)		1,170	1,170	1,170
K. Gross marketing loan outlays (mil)	((D * H) * 1000)	\$949	\$493	\$36
L. Export response (mil bu)	(I * ((E * F) / 100))	21	11	0.8
M. Domestic crush response (mil bu)	(J * ((E * G) / 100))	38	20	1.5
N. Per-bushel storage cost saving		\$0.35	\$0.35	\$0.35
O. Loan forfeiture and storage cost savings (mil)	((L + M) * (B + N))	\$305	\$158	\$12
P. Net marketing loan outlays (mil)	(K - O)	\$644	\$335	\$25
Per-bushel net marketing loan outlay	(P / (L + M))	\$10.82	\$10.82	\$10.82

the cost for a marketing loan would range from \$340 million with a high demand response (generating only a 43-million-bushel increase in exports and an 77-million-bushel increase in domestic crush) to \$644 million with a low response (with a 21-million-bushel jump in exports and a 38-million-bushel rise in domestic crush) (table 8). With a world price of \$4.75 a bushel, costs would be significantly lower, ranging from \$13 million with a high response to \$25 million with a low response. The increase in total use with a low response, however, would be insignificant because the

support level would only drop by 2 cents a bushel.

Although these estimates show that implementing a marketing loan for the 1987 soybean crop could be costly, other factors should be considered as well. First, with respect to demand considerations here and abroad, the flexibility of lowering the loan rate for corn and the statutory minimum loan rate of \$4.50 a bushel for soybeans over time could put soybeans at a disadvantage to corn. Second, while the use of generic certificates

and the EEP are encouraging market competitiveness for some program commodities, they have had little effect on soybeans. The use of generic certificates has lowered farm prices for corn and wheat below what they would have been otherwise. And, the EEP is pricing wheat and barley more competitively in world markets.

A critical assumption for all of the marketing loan cost estimates is that farm prices during the 1987/88 marketing year would be at or below loan repayment levels. If supply and demand conditions are such that prices are between loan rates and minimum loan repayment levels, then marketing loan costs would be less than those presented above.

V. COMPARISON OF THE MARKET IMPACTS OF THE USE OF GENERIC CERTIFICATES AND THE MARKETING LOAN PROGRAM

Whether the use of generic certificates produces the same effect on market prices for program commodities that would be achieved by marketing loans varies by commodity. It is estimated that the use of generic certificates reduced farm prices for corn during the 1986/87 marketing year about as much as a marketing loan would have. The use of certificates also reduced wheat prices, and it can be argued that a marketing loan likely would have had less of an effect on farm prices, given the supply and demand conditions that prevailed in 1986/87.

For the other feed grains and soybeans, however, certificates had little effect on farm prices during the 1986/87 marketing year. Therefore, marketing loans could have had a greater impact, particularly for soybeans where loan stocks are large and the repayment rate would be the lower of the announced world price or the loan rate, with no statutory minimum.

Generic Certificate Features

Generic certificates, first issued in the spring of 1986, have been popular because they:

- o Provide access to program commodities (wheat, rice, rye, corn, grain sorghum, barley, oats, soybeans, cotton, honey, and dairy products) either owned by CCC or that had been pledged as collateral in the Farmer-Owned Reserve (FOR) or Special Producer Storage Loan Program (SPSLP), at prices below loan rates. These stocks normally would be available to the market only when farm prices are above support levels sufficient to trigger their release.
- o Can be exchanged for old-crop commodities owned by CCC or that had been pledged as collateral to CCC in a given crop year, not just current crop-year commodities under loan as with marketing loans.
- o Increase marketing flexibility, enhance marketing opportunities, and protect income for holders.

- o Are issued in fixed dollar amounts, therefore, protecting farmers from declines in prices. When farm prices fall, posted county prices (PCPs) and CCC exchange values drop as well, increasing the amount of commodity for which certificates can be exchanged.
- o Can easily be sold or transferred. An active market exists nationally for certificates.
- o Can be returned to CCC only by original holders for cash at face value during the sixth through eighth months of the 8-month life of certificates (those issued for 1986 programs are subject to a 4.3-percent GRH reduction if exchanged for cash).

When producers exchange certificates for program commodities, interest expenses that the CCC would have charged them if their loans were repaid are foregone. Additionally, if producers were to store commodities at a commercial elevator, off-farm storage costs could be 26 cents a bushel for the full 9-month life of a loan. Thus, producers who would store loan collateral off farm would accrue the most benefit by exchanging certificates for the loan collateral at the time of loan placement, commonly referred to as "Quick PIK's".

How a producer chooses to use certificates depends on market conditions—farm prices, PCPs, loan rates, potential storage cost savings, and certificate premiums. If market prices and PCPs exceed the loan rate or are below it in percentage terms by less than the certificate premium, the producer would be better off selling certificates at the premium. The decision to sell the crop on the market or to place it under loan would depend only on the relation between farm prices and the loan rate.

When farm prices and PCPs are below loan rates in percentage terms by more than the certificate premium, the relationship between potential storage cost savings and the premiums must be considered. If the per-bushel storage cost as a percent of the

PCP is greater than the premium value, the producer would gain by using certificates to reacquire part or all of the commodity under loan. However, if the per-bushel storage cost as a percent of the PCP is less than the premium, the producer would be better off selling the certificate for the premium. The producer then would sell the crop or place it under loan depending on the relation between farm prices and the loan rate.

Prior to harvest, producers can free storage capacity by exchanging certificates for old-crop commodities that had been pledged as collateral for loans and then selling the commodities. And, when allowed, producers can exchange certificates for stocks in the FOR prior to harvest, sell the commodities before harvest, and replace the original FOR stocks with the new crop. By doing this, producers maintain the quality of their FOR stocks and sell the exchanged commodities at higher prices prior to harvest. Additionally, if the PCP is below the cash price, there are opportunities for arbitrage—exchanging and selling simultaneously to take advantage of the price differences.

For merchants, certificates also have several advantages. Certificates issued through the EEP and the Targeted Export Assistance (TEA) program allow domestic merchants to compete more effectively with foreign exporters in program commodity markets. Arbitrage opportunities exist for merchants if the CCC exchange value at a given location is below the cash price.

Certificates are cheaper than commodities for merchants to hold, and thereby reduce marketing costs for storage, handling, and transportation. For example, a merchant can acquire certificates anywhere in the United States and exchange them for commodities at most CCC storage locations. The merchant incurs the cost of acquiring the certificates (if not EEP or TEA issuances) and transferring them to the point of exchange. Although handling charges prior to storage are passed on to merchants, most other marketing costs up to the point of exchange are paid by CCC.

Certificate Exchange Patterns

Generic certificates are being exchanged primarily for corn and wheat. The share of

total exchanges made for corn and wheat was about 81 percent in June–August 1986, 89 percent in September–November 1986, 92 percent in December 1986–February 1987, and 95 percent in March–May 1987. Through July 15, 1987, cumulative certificate exchanges for corn totaled 3.35 billion bushels, with 95 percent acquired from stocks which had been pledged as collateral for price support loans. This indicates that virtually all exchanges for corn have been made by producers using certificates issued directly to them or purchased from others.

Wheat exchanges through July 15, 1987, totaled 541 million bushels, 66 percent of which had been pledged as collateral for price support loans. Thirty-four percent of wheat exchanges have come from stocks listed in CCC catalogues compared with 4 percent for corn. This was particularly true in June–August 1986 when 41 percent of wheat exchanges were made from stocks listed in CCC-issued catalogues. In March–May 1987, this amount increased sharply to 47 percent from 12 percent in the previous quarter.

How Certificates Affect Prices

When farm prices and PCPs are below loan rates, producers can acquire and sell commodities that otherwise would have remained under loan and eventually forfeited to CCC. Some Quick-PIK exchanges release stocks that would have been placed and left under loan and eventually forfeited to CCC, especially when prices are below the loan rate minus 9 months' storage costs.

When market prices are above the loan rate, advantages to producers using certificates diminish. The need for certificates is less, since equilibrium prices and marketings of stocks under loan are not as constrained by the loan program. However, if world prices are significantly below domestic prices, then the need for certificates would continue. Consequently, certificates tend to be used for those commodities where the spread between the loan rate and lower farm prices is largest. When farm prices exceed the loan rate, exchanges for either commodities which had been pledged as collateral for FOR or SPSLP loans or CCC-owned stocks will free up supplies otherwise unavailable to the market.

When certificate exchanges free additional supplies, prices fall and use rises. However, the increase in use generally is not as large as the amount exchanged. Initially, rising free stocks lower prices. This causes loan placements to rise, which in turn causes free stocks to decline.

Although certificate-exchanged supplies cannot be placed under loan again, a substitution between free and non-free stocks can happen. First, eligible commodities that might not have gone under loan may be placed under loan with lower prices. Second, because of lower prices, commodities that would have been redeemed may be left under loan, defaulted on, or, if open, placed in the FOR.

Outstanding generic certificates also affect markets because they represent a pool of potential free stocks that can be readily acquired.

Price Impacts for the 1986/87 Marketing Year

The effect that generic certificates have on crop prices varies by crop-year quarter. As a rule, exchanges affect commodity prices the least early in the crop year when prices are seasonally low, because free supplies are at seasonal highs following harvest. Free supplies then generally taper off over the rest of the crop year, resulting in a strengthening of prices. Consequently, certificate

exchanges during the fourth crop-year quarter will have a greater impact than in earlier quarters because the amount of commodity exchanged will be larger relative to the initial level of free supplies.

Typically, farm prices are lowest early in the crop year, then rise as the year progresses. However, seasonal price movements for corn have been flatter in 1986/87 (11). Without certificates, farm prices for corn in the June–August 1986 quarter would have been 10 to 20 cents a bushel higher than they were (table 9). Expectations of a large corn crop, the extended FOR rotation, and reduced loan rates already in place for wheat, barley, and oats, pushed corn prices below the 1985–crop loan rate during the summer quarter of the 1985/86 marketing year. But, corn exchanges of 215 million bushels were an important additional factor that lowered farm prices further.

With free supplies at record levels last September–November (the harvest quarter), corn exchanges likely reduced farm prices by 5 cents or less a bushel. In December–February, corn prices likely were lowered 10 to 20 cents a bushel from what they would have been without certificates. During March–May, exchanges likely reduced corn prices by 20 to 25 cents a bushel.

For wheat, impacts of exchanges on quarterly prices have been much smaller (6). During

Table 9--Generic certificate activity and farm price impacts

Commodity and item	June– Aug '86	Sept– Nov '86	Dec '86– Feb '87	Mar– May '87
Corn:				
Bushels exchanged (mil)	215	344	751	1,641
CCC inventories	39	24	14	45
Producer loans	176	320	737	1,596
Estimated farm price impacts (\$/bu)	-10 to -20	0 to -5	-10 to -20	-20 to -25
Wheat:				
Bushels exchanged (mil)	77	88	70	241
CCC inventories	32	4	8	117
Producer loans	45	84	62	124
Estimated farm price impacts (\$/bu)	0 to -5	-5 to -10	0 to -5	-5 to -10

Table 10--Examples of potential storage cost savings using certificates for Quick-PIK exchanges

Item	Computation	Corn	Wheat	Soybeans
A. Certificate value		\$1,000	\$1,000	\$1,000
B. Posted county price (PCP)		\$1.50	\$2.50	\$4.75
C. Per-bushel storage cost		\$0.26	\$0.26	\$0.26
D. Bushels exchanged	(A / B)	667	400	211
Storage cost saving	(C * D)	\$173	\$104	\$55
Storage cost saving as a share of the PCP	((C / B) * 100)	17.3%	10.4%	5.5%

June–August 1986 (the harvest quarter), price impacts were minimal because free supplies were large. In September–November, wheat prices likely were lowered by 5 to 10 cents a bushel from what they would have been without certificates. During December–February, market prices rose appreciably above the \$2.40 loan rate, and certificate exchanges minimally affected prices. Certificate exchanges rose sharply during March–May, largely due to changes in the way CCC set PCPs for normal protein wheat. Exchanges likely lowered farm prices for wheat by 5 to 10 cents in March–May.

Producers are more inclined to exchange certificates for commodities that had been pledged as loan collateral when the potential storage cost saving is the greatest. With annual per-bushel storage costs roughly the same for wheat, feed grains, and soybeans, the total storage savings using certificates is greatest for commodities with lower PCPs because more bushels can be exchanged with a given dollar value of certificates.

For example, at an annual elevator storage cost of 35 cents a bushel, the expense of storing commodities placed under loan for 9 months would be 26 cents a bushel. Assuming representative PCPs of \$1.50 for corn, \$2.50 for wheat, and \$4.75 for soybeans during 1986/87, storage cost savings can be computed. For a certificate valued at \$1,000, a producer could make a Quick-PIK exchange for either 667 bushels of corn, 400 bushels of wheat, or 211 bushels of soybeans (table 10). For these amounts, the total storage cost saving for corn of \$173 is 67 percent greater than the saving for wheat and more than triple that for soybeans. The per-bushel storage

cost as a percent of the PCP for each of these commodities shows why it is advantageous to use certificates for lower-priced commodities. In this example, the 17.3-percent ($(\$0.26 / \$1.50) * 100$) amount for corn reflects the significantly higher storage cost saving, and can be interpreted as an implied return.

Additionally, it would not be profitable for a producer to purchase certificates for an exchange unless the storage cost as a percent of the PCP is higher than the premium paid for them. This partially explains why very few certificates have been exchanged for soybeans. Most certificates are issued to producers as deficiency and diversion payments.

Since there is no income support program for soybeans, some producers would have to purchase certificates to acquire soybeans which are currently under loan. At a PCP equal to the 1986 loan rate, it would not be profitable to purchase certificates for a soybean exchange at a premium higher than 5.5 percent. For soybean producers who receive certificates as deficiency or diversion payments through other programs or who purchase them, storage costs foregone by exchanging certificates for other commodities would be greater than the costs avoided by exchanging them for soybeans.

An overwhelming share of certificates has been exchanged for corn. This has caused the greatest price impact among commodities because PCPs for corn in most locations have been below the loan rate throughout the 1986/87 marketing year and the storage cost saving is greater than for most other program

commodities. By comparing cumulative exchanges through May 1987 to total 1986/87 supply estimates in June 1987, the relative difference in exchanges by commodity can further be appreciated. Certificate exchanges as a percent of total supply were 24 percent for corn, 15 percent for rice, about 12 percent for wheat, grain sorghum, barley, and rye, and less than 1 percent for soybeans and oats.

Estimating the effects of generic certificate exchanges on the farm-level prices for program commodities besides corn and wheat would be difficult. For rice, the marketing loan implemented for the 1986 crop sharply reduced domestic market prices from levels in the previous crop year. Virtually all rice exchanged with certificates has come from rice listed in CCC issued catalogues and not from rice currently pledged as collateral for CCC loans. As for wheat, the national average farm price for barley was above the support level (\$1.49 a bushel) during nearly all of the 1986/87 marketing year.

Farm prices for grain sorghum, however, have been below its \$1.75-a-bushel effective loan rate throughout the 1986/87 marketing year. Separating the impacts of certificate exchanges and low corn prices on sorghum prices would be difficult. The very small level of exchanges for soybeans and oats suggest that certificates have had little or no effect on prices. Certificate-reduced corn prices, however, indirectly affect soybean prices. Lower corn prices encourage increased feed use, which in the long run leads to expansion in the livestock sector and further increased feeding of soymeal and feed grains.

Use of generic certificates is expected to lower the average farm price for corn by 10 to 15 cents a bushel during the 1986/87 marketing year. The average farm price for corn currently is projected to be \$1.55 a bushel. For wheat, use of certificates in 1986/87 is estimated to have reduced the average farm price by about 2 to 8 cents a bushel. The average farm price for wheat during 1986/87 was \$2.42 a bushel.

Whether a marketing loan program without the use of generic certificates would have a greater impact on farm prices than would the use of certificates depends primarily on supply and demand conditions for each commodity. U.S. stocks of corn and wheat were at record

highs at the beginning of the 1986/87 marketing year. The 8.25-billion-bushel corn crop in 1986/87 exceeded expected total use by 12 percent, pushing domestic corn prices well below the \$1.84 loan rate. Certificate exchanges for corn have kept prices below the loan rate longer than they would have been otherwise.

Without the use of generic certificates, the average annual farm price likely would have been around \$1.70 a bushel, based on the estimated price impact of 10 to 15 cents a bushel. Had a marketing loan been implemented for corn during the 1986/87 marketing year without the use of certificates, the average annual farm price for corn likely would have fallen to or below the loan repayment rate of \$1.68 a bushel, which is below the implied farm price for corn without certificates.

Had a marketing loan been implemented for wheat rather than using generic certificates, an argument can be made that the effect on the annual farm price likely would not have been as much. Supply and demand conditions during 1986/87 were such that prices generally exceeded the loan rate during most of the year, so the loan program did not create an effective barrier to marketing wheat. The 1986/87 wheat crop of 2.09 billion bushels was 5 percent less than the total use of 2.2 billion bushels. With a marketing loan, all production (1.68 billion bushels) on program harvested area would have been eligible for a loan. As it was, about 515 million bushels were placed under loan, of which 344 million had been redeemed through July 15, 1987. Very little 1986-crop wheat has been forfeited to CCC to date.

The difference between what was actually placed under loan and what could have been placed with a marketing loan was available to the market in the early part of the 1986/87 marketing year. Even so, average monthly farm prices dropped only slightly below the \$2.30 loan rate for a short period following harvest. Had the roughly 1.2 billion additional bushels been placed, most or all would have been redeemed, leaving free stocks basically unchanged.

Marketing loans are designed to encourage producers to redeem current crop-year commodities that otherwise would be forfeited

to CCC. Under a marketing loan program, only current-year commodities pledged as collateral for price support loans can be redeemed. Generic certificate exchanges, however, can free up not only current-year loan collateral but also crops pledged as collateral for price support loans in previous years and stocks owned by the CCC.

Over one-third of the 476 million bushels of wheat for which certificates were exchanged during 1986/87 came from CCC inventories. A marketing loan program would not have been able to free up this wheat. Without the use of certificates freeing up CCC-owned stocks, farm prices for wheat during 1986/87 could have been even higher, particularly during the fourth quarter. Over 72 percent of the 161 million bushels of wheat exchanged from CCC inventories during 1986/87 was freed to the market during the March-May quarter. However, this conclusion is based on the global market environment that occurred in 1986/87. Had a marketing loan been implemented during the 1986/87 marketing year without the use of certificates, the outcome for farm prices would have depended on how competitors responded to the marketing loan program.

The estimates of how marketing loan programs without certificates would have affected farm prices for corn and wheat during the 1986/87

marketing year are based on the assumption that U.S. prices reflected world supply and demand conditions. If world prices for corn and wheat in a changed competitive environment were driven below U.S. prices, a marketing loan without certificates could have lowered prices more than the use of certificates.

Potential Price Impacts for 1987/88

The use of generic certificates probably will directly affect farm prices for only corn and wheat during the 1987/88 marketing year. However, it is unclear whether the impact on the domestic corn market will be of the same magnitude as in 1986/87. It will depend on supply and demand conditions and the portion of program payments made in certificates.

Although the effective support level for 1987-crop corn will fall to \$1.82 a bushel from \$1.84, the decline is much less than this season's drop from 1985/86's \$2.55 a bushel. If corn prices continue to be below the loan rate, then the majority of certificates will continue to be exchanged for corn. Even if supply and demand conditions for wheat or soybeans are as imbalanced as for corn during the 1987/88 marketing year, certificates will be exchanged primarily for corn because the potential storage cost savings are greater.

A summary of some general characteristics of certificates versus marketing loans follows:

Generic Certificates

Generic certificates are issued in lieu of cash payments due to producers and merchants participating in commodity programs. Certificate use depends on market conditions (farm prices, PCPs and other exchange values, loan rates, storage costs, and certificate premiums), availability of certificates, and prevailing CCC procedures for setting PCPs and other exchange values.

Generic certificates can free up stocks of program commodities that otherwise would not be available to the market whether prices are below or above loan rates. During the

Marketing Loans

Marketing loans are implemented on a crop-year basis and function under specific guidelines.

Marketing loans free up stocks and lower prices only when prices are below loan rates. When farm prices are below loan rates, marketing loans encourage farmers

1986/87 marketing year, certificates have been exchanged primarily for corn and wheat.

Certificates can be exchanged for old-crop commodities which had been pledged as collateral for regular CCC price support loans, FOR loans, and SPSLP loans, or other commodities in CCC inventories as well as current crop-year loan collateral.

Because certificates are generic, their use is determined by market conditions. Certificates can be exchanged for any commodity which CCC has made available, but usually are exchanged for commodities with the greatest supply and demand imbalances.

When prices for commodities are below their respective loan rates, generic certificates have the potential of lowering prices even further. And, as for corn during the 1986/87 marketing year, certificate exchanges can free up stocks sufficient to keep prices below loan rates longer than they would be otherwise. Certificates, however, have only lowered farm prices for corn and wheat.

When certificates are exchanged for commodities that had been pledged as loan collateral, interest expenses that would have accrued from the point of exchange through the term of the loan are foregone.

who placed crops under loan to redeem and to market them rather than to forfeit them to CCC. With marketing loans, to date no 1986-crop rice or cotton has been forfeited to CCC.

Marketing loans only encourage redemptions of current crop-year loan collateral.

Marketing loans are not as flexible, but can lower prices for commodities for which they are implemented. Marketing loans effectively can lower price floors below announced loan rates for wheat and feed grains, and can eliminate price floors for rice, cotton, and soybeans.

Marketing loans have brought U.S. prices in line with world prices for cotton and rice, and potentially could lower prices for wheat, feed grains, and soybeans below their support levels.

With a marketing loan, interest expenses are foregone from the point at which producers repay loans.

VI. EFFECTS OF A SOYBEAN MARKETING LOAN ON OTHER OILSEEDS

The nonrecourse loan program for soybeans indirectly provides support for nonprogram oilseeds such as sunflowers and cottonseed. By removing the price floor provided by the soybean support rate, a soybean marketing loan would lower prices for these oilseeds as well. Yet, while soybean producers would receive income protection in the form of marketing loan payments (the difference between the loan rate and the loan repayment rate), producers of nonprogram oilseeds would have no such protection.

The Relationship Between Soybeans and Other Oilseeds

Oilseeds are crushed to produce meal and oil (and for cottonseed, hulls). The degree to which prices for nonprogram oilseeds follow soybean prices depends largely on the crush yields for oil and meal for these oilseeds and their respective prices. Prices for the end products are closely related (figs. 5 and 6).

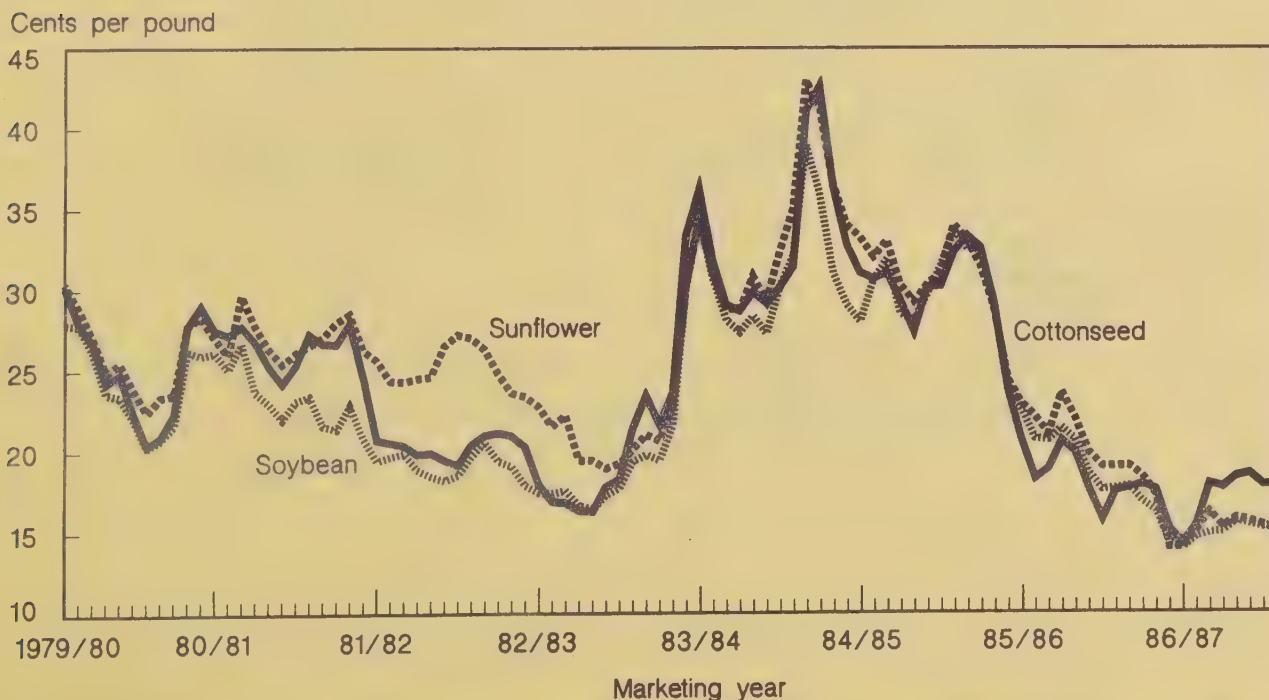
Typically, about 63 percent of the total value of crushed soybeans comes from meal and 37 percent from oil (table 11). In contrast,

almost 80 percent of the total value of sunflowers and 53 percent of the total value of cottonseed are from oil. Because soybean oil dominates the market for edible oils in the United States (accounting for 72 percent of the total market during the 1985/86 marketing year), the price for soybeans tends to be the base by which other oils are priced. Soybean meal is also a major high-protein feed source. Figure 7 shows the price relationships between soybeans, cottonseed, and sunflowers.

Historic price relationships indicate that a marketing loan for soybeans would lower farm prices for sunflowers and cottonseed. At an assumed average world soybean price of \$4.50 a bushel for the 1987 crop, prices are estimated to be \$74.50 a ton for cottonseed and 7.4 cents a pound for sunflowers (table 12). However, because the value of oil and meal differs across oilseeds, the price relationships, while strong, vary considerably. For example, the ratio of soybean to cottonseed price varied by almost 20 percent from the 1977/78 marketing year to the present, while that for soybeans to sunflowers varied by 15 percent.

Figure 5

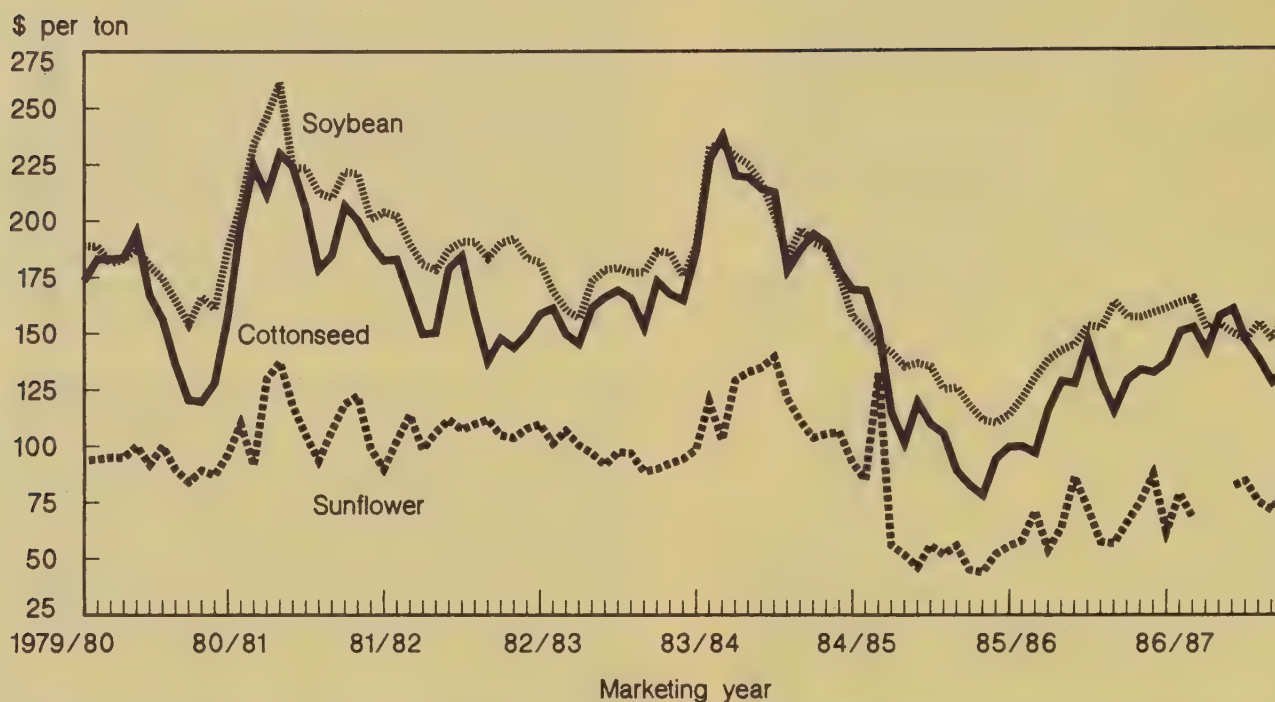
Average monthly price of vegetable oil¹



¹ Simple average of monthly cash prices using the following quotations: Soybean oil, crude, tank cars, f.o.b. Decatur; cottonseed oil, crude, tank cars, f.o.b. Valley Points; sunflower oil, crude, tank cars, f.o.b. Minneapolis.

Figure 6

Average monthly price of meal¹



^{1/} Simple average of monthly cash prices using the following quotations: Soybean meal, 44 percent protein (solvent), Decatur; cottonseed meal, 41 percent protein (solvent), Memphis; sunflower meal, 28 percent protein, Minneapolis.

Table 11--Average value of meal and oil as a percent of total product, 1978/79-1986/87

Oilseed	Meal	Oil
Percent of total oilseed value ^{1/}		
Soybeans	63	37
Cottonseed	34	53
Sunflowers	20	79

^{1/} Percentages do not necessarily total to 100.

Figure 7

Average monthly price received by producers¹

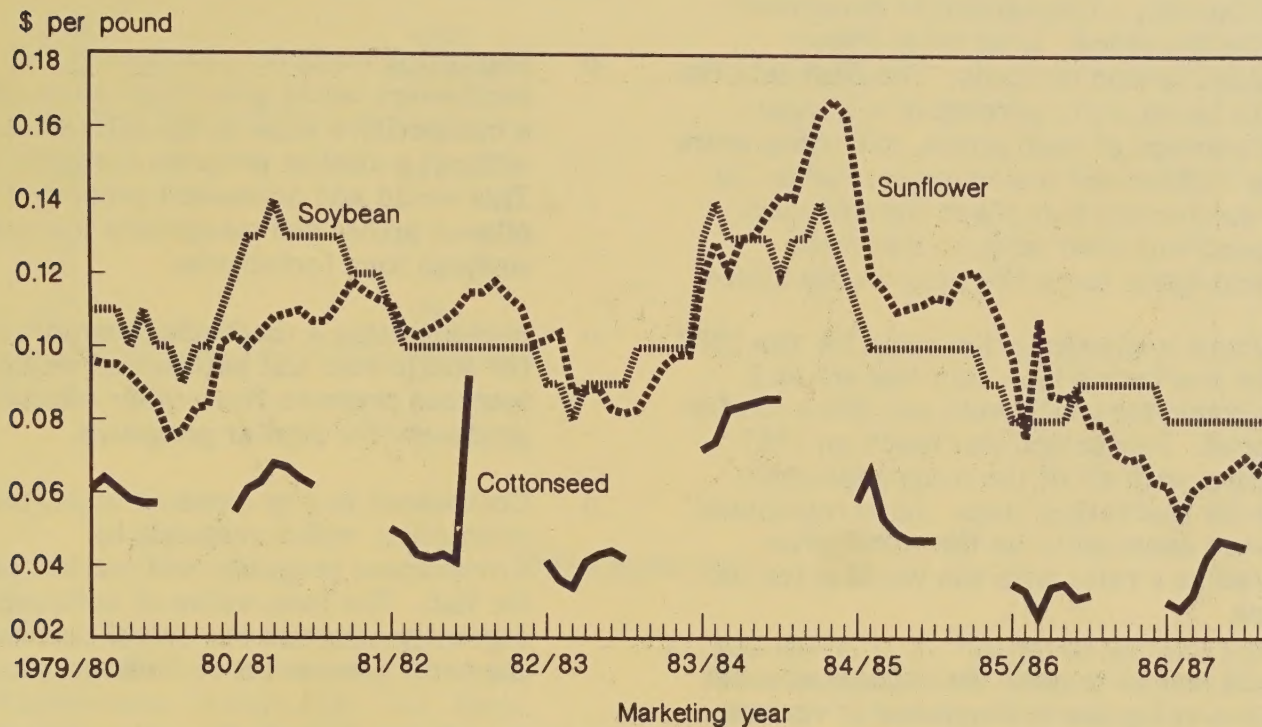


Table 12--Effects of a soybean marketing loan on prices for cottonseed and sunflowers

Assumed world soybean price	Resulting price for:	
	Cottonseed	Sunflowers
\$/bu	\$/ton	¢/lb
4.75	78.70	7.8
4.50	74.50	7.4
4.25	70.40	7.0

Marketing Loans for Sunflowers and Cottonseed

To implement marketing loans for sunflowers and cottonseed, a mechanism to determine loan rates is needed. Loan rates were determined by two methods. The first sets the loan rate based on 75 percent of a 5-year moving average of cash prices, excluding years with the highest and lowest prices (table 13). Such a mechanism is in place for soybeans. The second sets loan rates on a soybean equivalent basis, using the price ratios above.

To estimate implementation costs for the 1987 crop, the marketing loan rate was set at 8 cents a pound for sunflowers and \$80 a ton for cottonseed. Production was based on 1987 projections with all of the output assumed eligible for marketing loans. Loan repayment rates were assumed to be the world price estimated as a ratio with the world price for soybeans.

Tables 14 and 15 present the estimated costs of implementing marketing loans at various world prices. If a soybean marketing loan were implemented and soybean prices were \$4.75 per bushel, costs for a marketing loan could total \$5 million for sunflowers and \$9 million for cottonseed. However, if the world price for soybeans were \$4.25 a bushel, costs

for sunflower and cottonseed programs could total roughly \$75 million.

Other considerations include:

- o Marketing loans for cottonseed and sunflowers would give these commodities a competitive edge in the oilseed market without a similar program for soybeans. This would add downward pressure to all oilseed prices and marginally increase soybean loan forfeitures.
- o Implementing a marketing loan program for sunflowers and cottonseed would increase pressure from other oilseed producers for similar programs.
- o Cottonseed is a by-product of cotton lint production, which responds to Government programs and market prices for lint. The farm value of cottonseed currently accounts for only 7 percent of the total gross revenue from cotton.
- o A cottonseed marketing loan would be difficult to implement technically in that producers do not store cottonseed and a significant portion of the seed is not handled by crushers but is fed to livestock as whole seed.

Table 13--Potential minimum loan rates for sunflowers and cottonseed

Crop year	Soybeans	Sunflowers		Cottonseed	
		Soybean equivalent <u>1/</u>	Moving average <u>2/</u>	Soybean equivalent <u>3/</u>	Moving average <u>2/</u>
	\$/bu	-----¢/lb-----		-----\$/ton-----	
1983	5.02	8.2	10.4	83.3	112.5
1984	5.02	8.2	10.5	83.3	109.0
1985	5.02	8.2	10.5	83.3	98.0
1986	4.56	7.5	7.7	75.7	65.8
1987	4.77	7.8	---	79.2	---
1988	4.53	7.4	---	75.0	---
1989	4.50	7.4	---	74.5	---
1990	4.50	7.4	---	74.5	---

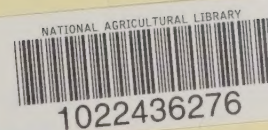
1/ Soybean equivalent equals soybean loan rate times 1.64. 2/ 75 percent of a 5-year moving average of farm prices, excluding years with the highest and lowest prices. 3/ Soybean equivalent equals soybean loan rate times 16.56.

Table 14--Estimated costs of a marketing loan for sunflowers

World price	CCC outlays
¢/lb	Mil \$
7.8	5
7.5	13
7.0	26

Table 15--Estimated costs of a marketing loan for cotton

World price	CCC outlays
\$/ton	Mil \$
78	9
75	23
70	47



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